

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 09/709,774A  
Source: 1FW16  
Date Processed by STIC: 10/22/04

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 10/22/2004

PATENT APPLICATION: US/09/709,774A

TIME: 12:16:46

Input Set : A:\-62-4.app

Output Set: N:\CRF4\10222004\I709774A.raw

3 <110> APPLICANT: Sette, Alessandro  
 4 Gaeta, Federico  
 5 Grey, Howard M.  
 6 Sidney, John  
 7 Alexander, Jeffery L.  
 8 Epimmune Inc.  
 10 <120> TITLE OF INVENTION: Alteration of Immune Response Using Pan DR-Binding  
 11 Peptides  
 13 <130> FILE REFERENCE: 018623-006240US  
 15 <140> CURRENT APPLICATION NUMBER: US 09/709,774A  
 16 <141> CURRENT FILING DATE: 2000-11-08  
 18 <150> PRIOR APPLICATION NUMBER: US 08/121,101  
 19 <151> PRIOR FILING DATE: 1993-09-14  
 21 <150> PRIOR APPLICATION NUMBER: US 08/305,871  
 22 <151> PRIOR FILING DATE: 1994-09-14  
 24 <150> PRIOR APPLICATION NUMBER: US 60/010,510  
 25 <151> PRIOR FILING DATE: 1996-01-24  
 27 <150> PRIOR APPLICATION NUMBER: US 08/788,822  
 28 <151> PRIOR FILING DATE: 1997-01-23  
 30 <160> NUMBER OF SEQ ID NOS: 22  
 32 <170> SOFTWARE: PatentIn Ver. 2.1  
 34 <210> SEQ ID NO: 1  
 35 <211> LENGTH: 13  
 36 <212> TYPE: PRT  
 37 <213> ORGANISM: Artificial Sequence  
 39 <220> FEATURE:  
 40 <223> OTHER INFORMATION: Description of Artificial Sequence:HA 307-319  
 42 <400> SEQUENCE: 1  
 43 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr  
 44 1 5 10  
 47 <210> SEQ ID NO: 2  
 48 <211> LENGTH: 24  
 49 <212> TYPE: PRT  
 50 <213> ORGANISM: Artificial Sequence  
 52 <220> FEATURE:  
 53 <223> OTHER INFORMATION: Description of Artificial Sequence:MBP 78-101  
 55 <400> SEQUENCE: 2  
 56 Gly Arg Thr Gln Asp Glu Asn Pro Val Trp His Phe Phe Lys Asn Ile  
 57 1 5 10 15  
 59 Val Thr Pro Arg Thr Pro Pro Pro  
 60 20  
 63 <210> SEQ ID NO: 3  
 64 <211> LENGTH: 12

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65 <212> TYPE: PRT
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: Description of Artificial Sequence:MT 65 kd 3-13
71 <400> SEQUENCE: 3
72 Tyr Lys Thr Ile Ala Phe Asp Glu Glu Ala Arg Arg
73   1               5               10
76 <210> SEQ ID NO: 4
77 <211> LENGTH: 14
78 <212> TYPE: PRT
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Description of Artificial Sequence:717.01
83   combinatorial
85 <400> SEQUENCE: 4
86 Tyr Ala Arg Phe Gln Ser Gln Thr Thr Leu Lys Gln Lys Thr
87   1               5               10
90 <210> SEQ ID NO: 5
91 <211> LENGTH: 14
92 <212> TYPE: PRT
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Description of Artificial Sequence:Tet Tox 830-843
98 <400> SEQUENCE: 5
99 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu
100  1               5               10
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 13
105 <212> TYPE: PRT
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: Description of Artificial Sequence:Tet Tox
110   1272-1284
112 <400> SEQUENCE: 6
113 Asn Gly Gln Ile Gly Asn Asp Pro Asn Arg Asp Ile Leu
114  1               5               10
117 <210> SEQ ID NO: 7
118 <211> LENGTH: 17
119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence:RQIV
125 <400> SEQUENCE: 7
126 Tyr Ala His Ala Ala His Ala Ala His Ala Ala His Ala
127  1               5               10               15
129 Ala
132 <210> SEQ ID NO: 8
133 <211> LENGTH: 14
134 <212> TYPE: PRT

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135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Description of Artificial Sequence:Ova 323-336
140 <400> SEQUENCE: 8
141 Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu
142   1           5           10
145 <210> SEQ ID NO: 9
146 <211> LENGTH: 16
147 <212> TYPE: PRT
148 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Description of Artificial Sequence:lambda rep
152   12-26
154 <400> SEQUENCE: 9
155 Tyr Leu Glu Asp Ala Arg Arg Leu Lys Ala Ile Tyr Glu Lys Lys Lys
156   1           5           10           15
159 <210> SEQ ID NO: 10
160 <211> LENGTH: 17
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Description of Artificial Sequence:HEL 46-61
167 <400> SEQUENCE: 10
168 Tyr Asn Thr Asp Gly Ser Thr Asp Tyr Gly Ile Leu Gln Ile Asn Ser
169   1           5           10           15
171 Arg
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 20
176 <212> TYPE: PRT
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence:HBVnc 50-69
182 <400> SEQUENCE: 11
183 Pro His His Thr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu Leu
184   1           5           10           15
186 Met Thr Leu Ala
187           20
190 <210> SEQ ID NO: 12
191 <211> LENGTH: 21
192 <212> TYPE: PRT
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence:CS 378-398
198 <400> SEQUENCE: 12
199 Asp Ile Phe Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe
200   1           5           10           15
202 Asn Val Val Asn Arg
203           20
206 <210> SEQ ID NO: 13

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207 <211> LENGTH: 16  
 208 <212> TYPE: PRT  
 209 <213> ORGANISM: Artificial Sequence  
 211 <220> FEATURE:  
 212 <223> OTHER INFORMATION: Description of Artificial Sequence:MT (Y)17-31  
 214 <400> SEQUENCE: 13  
 215 Tyr Ser Gly Pro Leu Lys Ala Glu Ile Ala Gln Arg Leu Glu Asp Val  
 216    1                    5                    10                    15  
 219 <210> SEQ ID NO: 14  
 220 <211> LENGTH: 13  
 221 <212> TYPE: PRT  
 222 <213> ORGANISM: Artificial Sequence  
 224 <220> FEATURE:  
 225 <223> OTHER INFORMATION: Description of Artificial Sequence:HBVc 128-140  
 227 <400> SEQUENCE: 14  
 228 Thr Pro Pro Ala Tyr Arg Pro Pro Asn Ala Pro Ile Leu  
 229    1                    5                    10  
 232 <210> SEQ ID NO: 15  
 233 <211> LENGTH: 13  
 234 <212> TYPE: PRT  
 235 <213> ORGANISM: Artificial Sequence  
 237 <220> FEATURE:  
 238 <223> OTHER INFORMATION: Description of Artificial Sequence:PLP 139-151  
 240 <400> SEQUENCE: 15  
 241 His Ser Leu Gly Lys Trp Leu Gly His Pro Asp Lys Phe  
 242    1                    5                    10  
 245 <210> SEQ ID NO: 16  
 246 <211> LENGTH: 4  
 247 <212> TYPE: PRT  
 248 <213> ORGANISM: Artificial Sequence  
 250 <220> FEATURE:  
 251 <223> OTHER INFORMATION: Description of Artificial Sequence:R-4 in pan DR  
 252       binding peptide formula  
 254 <400> SEQUENCE: 16  
 255 Trp Thr Leu Lys  
 256    1  
 259 <210> SEQ ID NO: 17  
 260 <211> LENGTH: 13  
 261 <212> TYPE: PRT  
 262 <213> ORGANISM: Artificial Sequence  
 264 <220> FEATURE:  
 265 <223> OTHER INFORMATION: Description of Artificial Sequence:Pan DR binding  
 266       peptide  
 268 <220> FEATURE:  
 269 <221> NAME/KEY: MOD\_RES  
 270 <222> LOCATION: (3)  
 271 <223> OTHER INFORMATION: Xaa = cyclohexylalanine  
 273 <400> SEQUENCE: 17  
 W--> 274 Ala Ala Xaa Ala Ala Ala Lys Thr Ala Ala Ala Ala Ala

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Input Set : A:\-62-4.app

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275      1          5          10
278 <210> SEQ ID NO: 18
279 <211> LENGTH: 13
280 <212> TYPE: PRT
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: Description of Artificial Sequence:Pan DR binding
285      peptide
287 <220> FEATURE:
288 <221> NAME/KEY: MOD_RES
289 <222> LOCATION: (3)
290 <223> OTHER INFORMATION: Xaa = cyclohexylalanine
292 <400> SEQUENCE: 18
W--> 293 Ala Ala Xaa Ala Ala Ala Ala Thr Leu Lys Ala Ala Ala
294      1          5          10
297 <210> SEQ ID NO: 19
298 <211> LENGTH: 13
299 <212> TYPE: PRT
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Description of Artificial Sequence:Pan DR binding
304      peptide
306 <220> FEATURE:
307 <221> NAME/KEY: MOD_RES
308 <222> LOCATION: (3)
309 <223> OTHER INFORMATION: Xaa = cyclohexylalanine
311 <400> SEQUENCE: 19
W--> 312 Ala Ala Xaa Val Ala Ala Ala Thr Leu Lys Ala Ala Ala
313      1          5          10
316 <210> SEQ ID NO: 20
317 <211> LENGTH: 13
318 <212> TYPE: PRT
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <223> OTHER INFORMATION: Description of Artificial Sequence:Pan DR binding
323      peptide
325 <220> FEATURE:
326 <221> NAME/KEY: MOD_RES
327 <222> LOCATION: (3)
328 <223> OTHER INFORMATION: Xaa = cyclohexylalanine
330 <400> SEQUENCE: 20
W--> 331 Ala Ala Xaa Ile Ala Ala Ala Thr Leu Lys Ala Ala Ala
332      1          5          10
335 <210> SEQ ID NO: 21
336 <211> LENGTH: 13
337 <212> TYPE: PRT
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: Description of Artificial Sequence:Pan DR binding

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/709,774A

DATE: 10/22/2004  
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Input Set : A:\-62-4.app  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; Xaa Pos. 3 ✓  
Seq#:18; Xaa Pos. 3 ✓  
Seq#:19; Xaa Pos. 3 ✓  
Seq#:20; Xaa Pos. 3 ✓  
Seq#:21; Xaa Pos. 3

**VERIFICATION SUMMARY**

DATE: 10/22/2004

PATENT APPLICATION: US/09/709,774A

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Input Set : A:\-62-4.app

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L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0